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Exhibit R-2, RDT&E Budget Item Justification							Date: February 1999			
APPROPRIATION/BUDGET ACTIVITY RESEARCH, DEVELOPMENT, TEST& EVALUATION, NAVY/BA-5							R-1 ITEM NOMENCLATURE. Airborne Mine Countermeasures/0604373N			

COST (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total P.E. Cost	17.297	30.877	50.642	51.279	56.582	53.293	9.824	0	0	366.780
Airborne Mine Hunt Systems Q0529	15.411	19.844	15.599	17.064	10.011	0	0	0	0	174.915
ALMDS Q2047	0	4.897	19.904	18.272	15.083	21.636	0	0	0	79.792
SWIMS Q2427	1.886	2.146	4.830	7.873	12.792	15.042	0	0	0	44.569
AMNS Q2473	0	1.995	10.309	8.070	18.696	16.615	9.824	0	0	65.509
SWMS Acoustic Projector Q2642	0	1.995	0	0	0	0	0	0	0	1.995
Quantity of RDT&E Articles & Cost										

A. Mission Description and Budget Item Justification: This program develops airborne mine countermeasures systems that are required to counter known and projected mine threats. It provides a capability to locate pressure-combination and sweep resistant mines at greater coverage rates and by more rapidly deployable means. It also provides a non-acoustic mine detection and classification capability against floating and tethered mines using Light Detection and Ranging (LIDAR) techniques. Cable improvements will provide higher reliability, longer life and higher current capacity. This program is funded under ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

B. Program Change Summary:

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
FY 1999 President's Budget:	17.905	24.967	23.644
Appropriated Value:	17.905	30.877	
Adjustment to FY 1998 Appropriated Value/			
FY 1999 President's Budget:	-.608	+5.910	+26.998
FY 2000/01 PRES Budget Submit:	17.297	30.877	50.642

Funding: FY98 reflects SBIR reduction (-\$284 thousand) and below threshold reprogrammings (-\$324 thousand). FY99 reflects acceleration of C4I Upgrade Development (+\$2,146 thousand), and Congressional adds for CH-60 integration (+\$2,000 thousand) and SWIMS acoustic projector development (+\$2,000 thousand), and minor program reductions (-\$21 thousand) and Congressional undistributed reductions (-\$215 thousand). FY00 reflects acceleration of development efforts for SWIMS (+\$5,000 thousand), AQS-20/X (+\$3,300 thousand) and ALMDS (+\$14,300 thousand), inflation adjustments (-\$602 thousand), and initiation of E&MD for the Rapid Airborne Mine Clearing System (RAMICS (+\$5.000 thousand)).

Schedule: See individual project sheets.

Technical: See individual project sheets.

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Exhibit R-2a, RDT&E,N Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N , BA-5	PROGRAM ELEMENT NAME AND NUMBER:Airborne Mine Countermeasures/0604373N	PROJECT NAME AND NUMBER: Airborne Mine Hunt Systems/Q0529

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	15.411	19.844	15.599	17.064	10.011	0	0	0	0	174.915
RDT&E Articles Qty										

A Mission Description and Budget Item Justification

This project includes a sonar for mine detection, classification and identification; a system for mine neutralization by explosive charge, equipment to provide shallow water mine sweeping. There is currently no rapid airborne mine neutralization capability to support minehunting. Additionally, the Navy does not possess a capability to conduct high speed minefield reconnaissance to determine mine density and location. The Advanced Sonar is being developed to address the emergent requirement for mine identification and to integrate AMCM systems with an CH-60S platform. The sonar will be developed to meet the capabilities inherent with the new tow platform.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 1998 ACCOMPLISHMENT:

- (U) (\$3.056) Q-20 – Completed contractor demonstration. Accepted delivery of Engineering Development Model.
- (U) (\$4.519) Q-20 – Conducted final AQS-20 Developmental Testing and transition to the Advanced Sonar system.
- (U) (\$2.771) AMNS – Delivered NDI prototype model.
- (U) (\$2.558) AMNS – Conducted fly-off testing.
- (U) (\$2.507) AMNS – Procured and test the test equipment, and perform data analysis.

2. (U) FY 1999 PLAN:

- (U) (\$7.390) AN/AQS-20/X – Completing EDM 2 and conducting the DT assist.
- (U) (\$.200) HORIZAN – Configuration Theory Tactical Decision Aid.
- (U) (\$3.192) Laser Line Scan System (LLSS) – Initiate integration of the LLSS into the AN/AQS-14A.
- (U) (\$6.321) AMNS - Award EMD contract for integration into the helicopter.
- (U) (\$2.383) AMNS - Perform system integration, data analysis, TECHEVAL preparations.
- (U) (\$.358) Portion of extramural program is reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2000 PLAN:

- (U) (\$2.506) LLSS – Continue integration into the AN/AQS-14A and demonstrate the LLSS.

- (U) (\$5.269) AN/AQS-20/X – Continue integration of ID Sensor and H-60 conversion.

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Exhibit R-2a RDT&E Justification
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Exhibit R-2a, RDT&E,N Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N , BA-5	PROGRAM ELEMENT NAME AND NUMBER:Airborne Mine Countermeasures/0604373N	PROJECT NAME AND NUMBER: Airborne Mine Hunt Systems/Q0529

- (U) (\$7.824) AN/AQS-20/X – Design identification system and initiate modification of EDMs.
- (U) AMNS – Transferred to project Q2473 P.E. 0604373N

B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 424800										
AQS-20/X	0	0	18.200	12.000	18.773	32.145	25.944	21.000	0	128.062
AN/AQS-14A LLSS	0	0	0	4.448	0	0	0	0	0	4.448

C. Acquisition Strategy: Continue AN/AQS-20 to OPEVAL and Milestone III, procuring three (3) LRIP systems starting in FY 01. This gives the fleet an MH-53E interim capability. P³I the AQS-20 with ID capability and integrate it to the H-60 platform, thus creating the AN/AQS-20X. FY 99 funds the interim capability of design, integration, and testing of an ID capability on the AN/AQS-14A Laser Line Scan (LLS). Limited production of four (4) systems in FY 01.

D. Schedule Profile: See attached.

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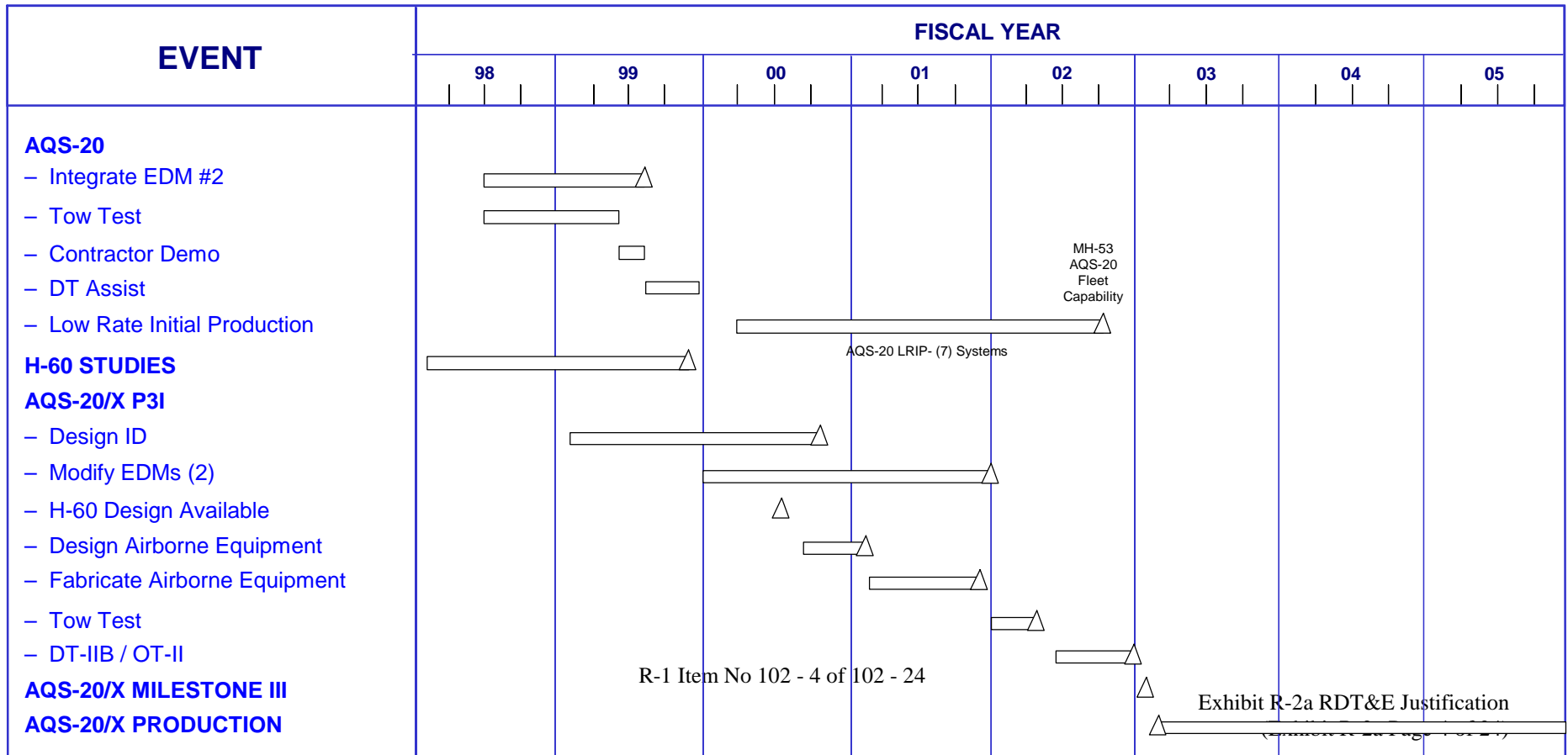
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Exhibit R-2a, RDT&E,N Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N , BA-5	PROGRAM ELEMENT NAME AND NUMBER:Airborne Mine Countermeasures/0604373N	PROJECT NAME AND NUMBER: Airborne Mine Hunt Systems/Q0529

AN/AQS-20/X SONAR MINE DETECTING SET



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AN/AQS-14A SONAR DETECTING SET

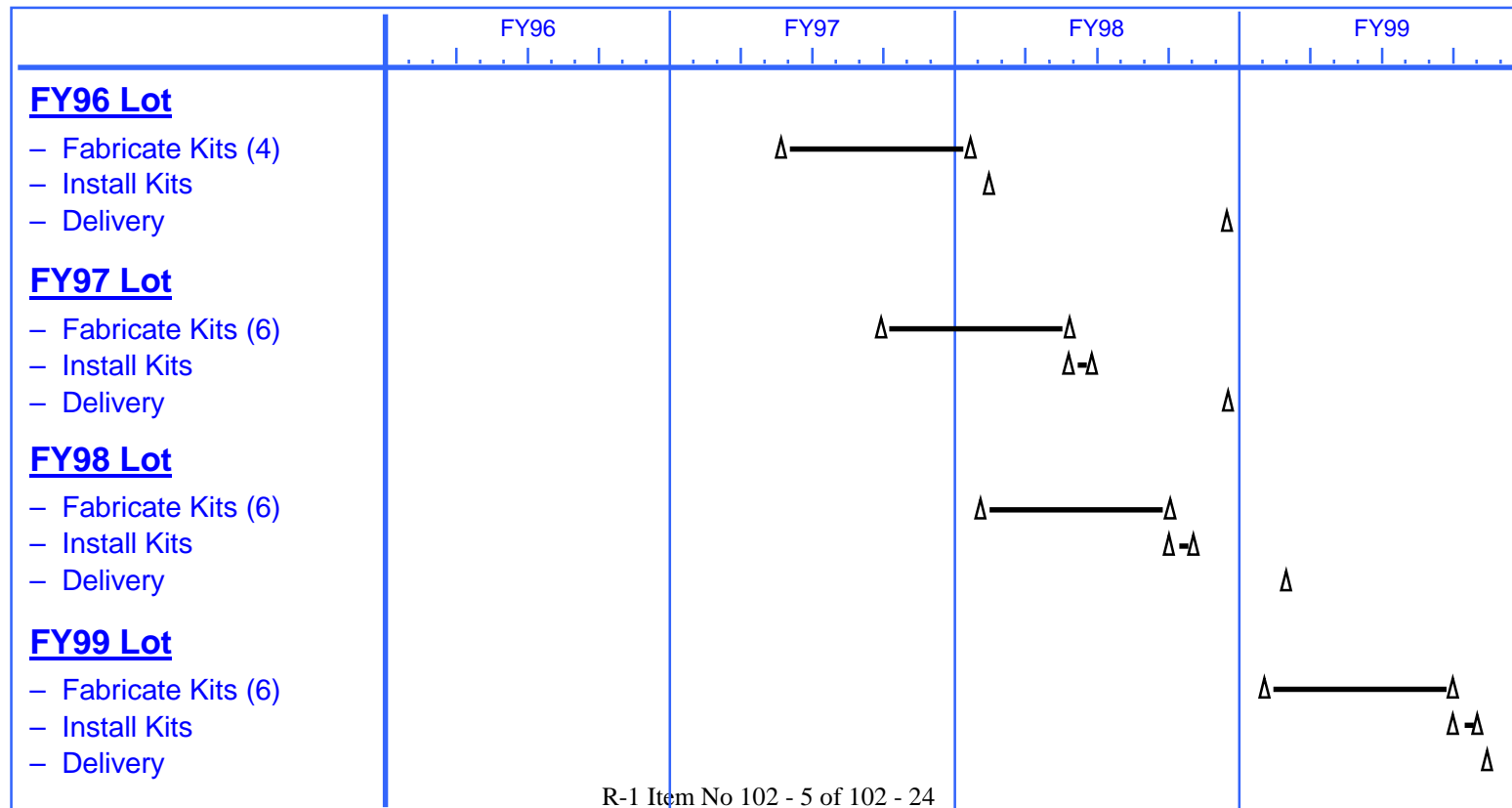


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Exhibit R-2a, RDT&E,N Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N , BA-5	PROGRAM ELEMENT NAME AND NUMBER:Airborne Mine Countermeasures/0604373N	PROJECT NAME AND NUMBER: Airborne Mine Hunt Systems/Q0529

AIRBORNE MINE NEUTRALIZATION SYSTEM (AMNS)

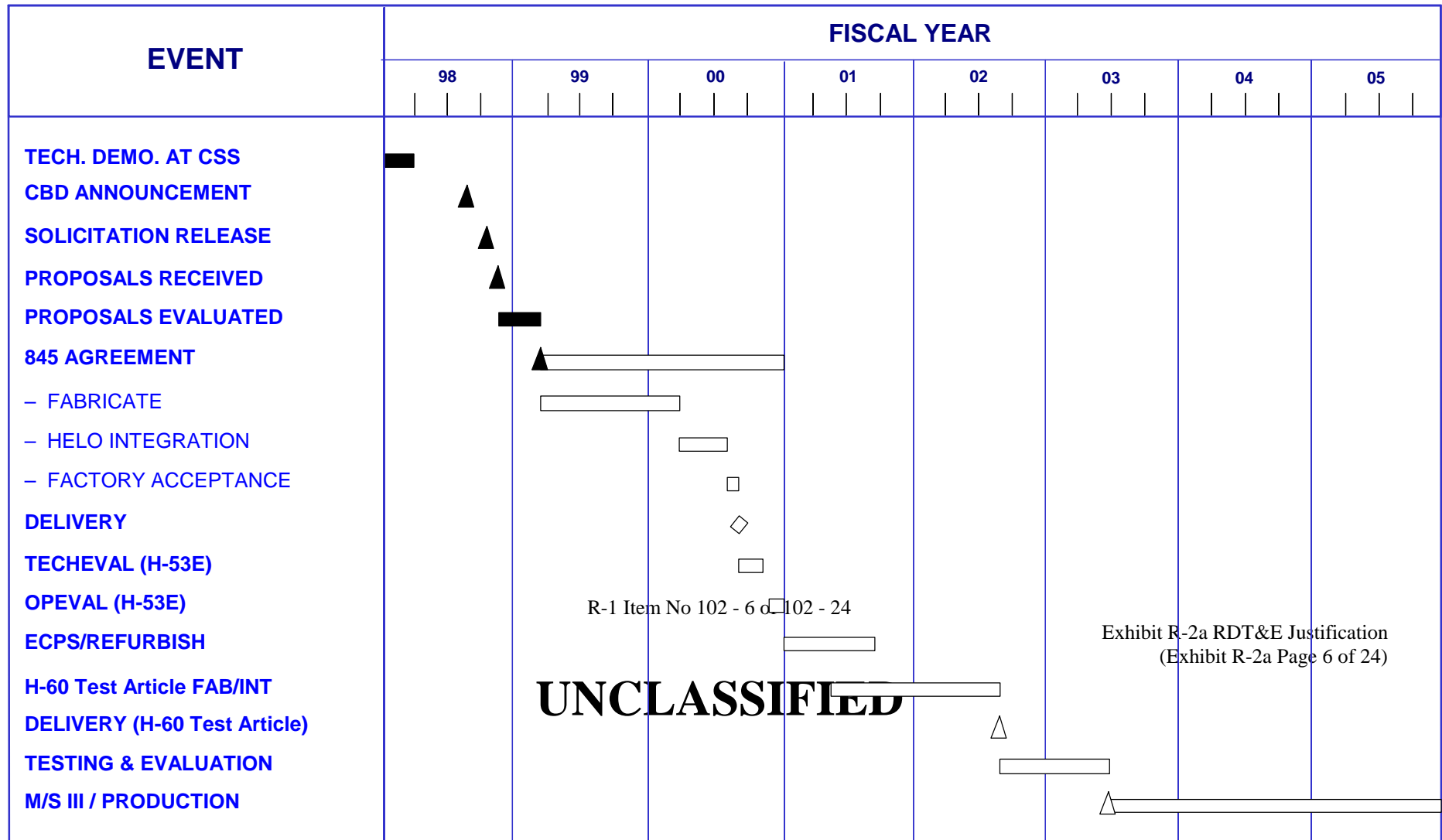


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Exhibit R-3 Cost Analysis							Date: February 1999					
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5			Program Element Name & No: Airborne Mine Countermeasures 0604373N.					Project Name and Number: Airborne Mine Hunt Systems/Q0529				

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development AQS-20/X AQS-14A LLS AMNS	C/CPFF C/FF C/FP	Raytheon, RI TBD TBD	54.631	4.536 2.624 4.750	01/99 10/98 12/98	1.238 1.678	11/99 10/99			17.902 1.134	78.307 5.436 4.750	
Ancillary Engineering AQS-20/X	C/CPFF	Raytheon, RI				5.700	11/99				5.700	
Systems Engineering		VARIOUS	33.535	.933	10/98						34.468	
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			88.166	12.843		8.616				19.036	128.661	
Remarks:												
Development Support Equipment	WR	VARIOUS		.910	10/98	.506	10/99	.		.592	2.008	
Software Development												
Training Development		VARIOUS	2.000								2.000	
Integrated Logistics Support		VARIOUS	3.852	.929	10/98						4.781	
Configuration Management		VARIOUS	2.000								2.000	
Technical Data												
GFE												
Subtotal Support			7.852	1.839		.506		.		.592	10.789	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	Fy00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract

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Exhibit R-3 Cost Analysis							Date: February 1999					
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5			Program Element Name & No: Airborne Mine Countermeasures 0604373N.					Project Name and Number: Airborne Mine Hunt Systems/Q0529				

Developmental Test & Evaluation	WR	CSS, Panama City		3.700	10/98					2.406	6.106	
Operational Test & Evaluation	WR	CSS, Panama City				4.500	10/99			3.511	8.011	
Tooling												
GFE												
Subtotal T&E				3.700		4.500				5.917	14.117	
Remarks:												
Contractor Engineering Support												
Government Engineering Support		VARIOUS	8.237								8.237	
Program Management Support		VARIOUS	8.142	1.402	11/98	1.957	11/99			1.510	13.011	
Program Management Personnel												
Travel				.060		.020				.020	.100	
Labor (Research Personnel)												
Overhead												
Subtotal Management			16.379	1.462		1.977				1.530	21.348	
Remarks:												
Total Cost			112.397	19.844		15.599				27.075	174.915	
Remarks: : AN/AQS-20/X Project Only (FY99=\$7.590, FY00=\$5.269, FY01=\$15.072); AQS-14A LLS Project Only (FY99=\$3.192, FY00=\$2.506, FY01=\$1.992); AMNS Project Only (FY99=\$8.883)												

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Exhibit R-2a, RDT&E Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5	Program Element Name & No: Airborne Mine Countermeasures 0604373N.	Project Name and Number: Shallow Water Influence Minesweep System/Q2427	

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	1.886	2.146	4.830	7.873	12.792	15.042	0	0	0	44.569
RDT&E Articles Qty										

A. Mission Description and Budget Item Justification

The SWIMS will provide a self-contained, high tow speed, shallow water influence minesweep capability.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 1998 ACCOMPLISHMENTS:

- (U) (\$1.886) Awarded contract for design development of the demonstration system. Procured material required for fabrication.

2. (U) FY 1999 PLAN:

- (U) (\$2.146) Conduct Analysis of Alternatives. Prepare RFP and conduct proposal evaluation.

3. (U) FY 2000 PLAN:

- (U) (\$4.830) Award contract and begin engineering/design efforts.

B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 424800										
SWIMS	9.581	0	0	0	0	3.600	15.700	6.300	17.000	52.181

C.Acquisition Strategy: Following an Analysis of Alternatives in FY99, a CPFF contract will be awarded using full and open competition. The program will be managed by PMS210.

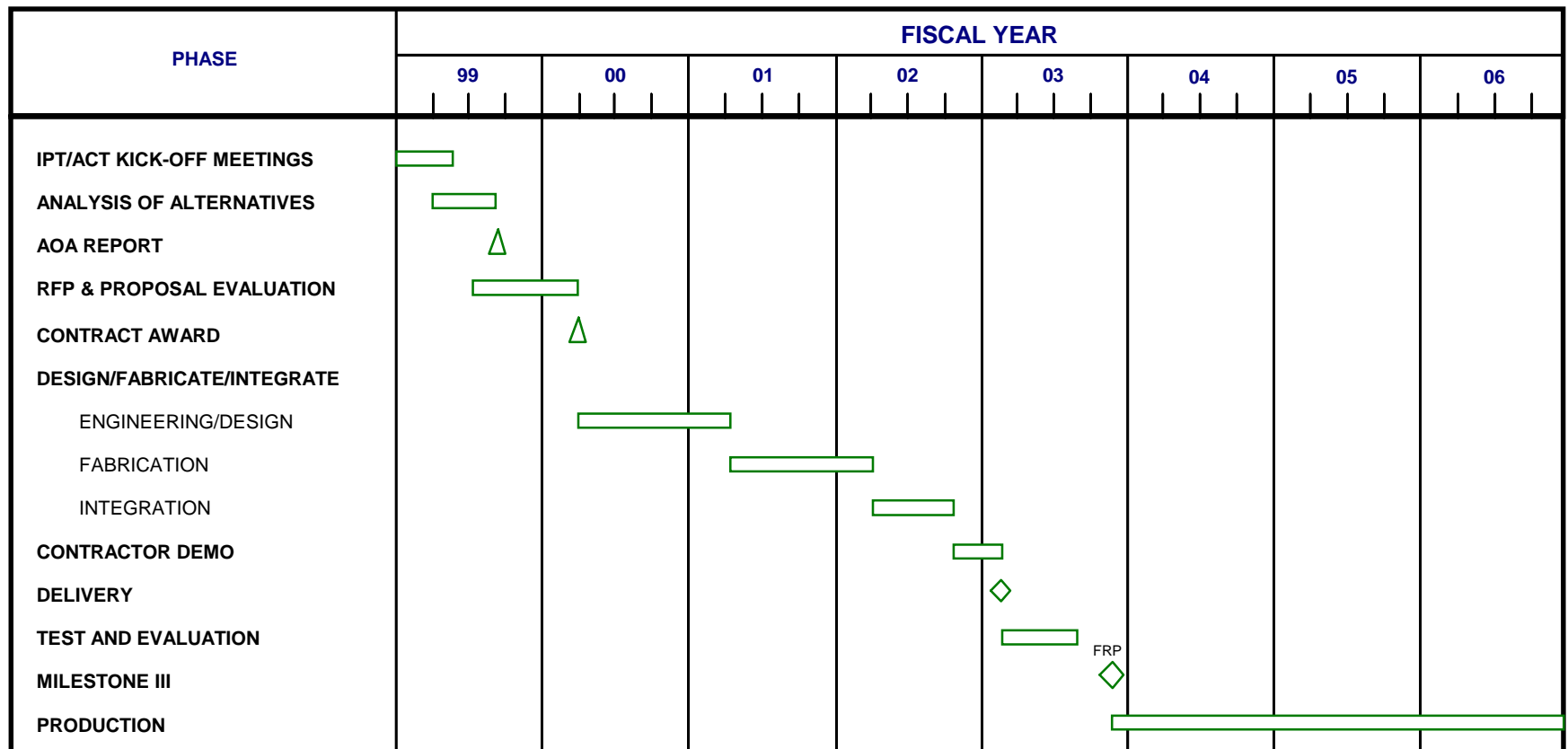
D. Schedule Profile

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Exhibit R-2a, RDT&E Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5	Program Element Name & No: Airborne Mine Countermeasures 0604373N.	Project Name and Number: Shallow Water Influence Minesweep System/Q2427

SHALLOW WATER INFLUENCE MINESWEEP SYSTEM (SWIMS)



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Exhibit R-2a, RDT&E Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5	Program Element Name & No: Airborne Mine Countermeasures 0604373N.	Project Name and Number: Shallow Water Influence Minesweep System/Q2427

SWIMS ACOUSTIC PROJECTOR

EVENT	FY99	FY00	FY01
<u>PHASE 1 - TEST REQMTS</u>			
Test Plan and Procedures			
Requirements Review			
<u>PHASE 2 - DESIGN</u>			
Packaging and Wiring Harness Design			
Design Status Review			
<u>PHASE 3 - ASSEMBLY & TEST</u>			
Assembly and Test			
Program Summary Review			

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Exhibit R-3 Cost Analysis										Date: February 1999	
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N			Program Element Name & No.Airborne Mine Countermeasures 0604373N				Project Name and Number. Shallow Water Influence Minesweep System/Q2427				

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date		FY01 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPFF	EDO Corp/TBD	1.722	0	N/A	.750	11/99			11.215	13.687	
Ancillary Hardware Development												
Systems Engineering		VARIOUS				2.171	11/99			3.142	5.313	
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			1.722	0		2.921				14.357	19.000	
Remarks:												
Development Support Equipment												
Software Development		TBD	0	0		.300	11/99			1.110	1.410	
Training Development		TBD	0	0		0				1.000	1.000	
Integrated Logistics Support		TBD	0	0		.420	11/99	.		1.600	2.020	
Configuration Management		TBD	0	0		.277	11/99	.		1.300	1.577	
Technical Data												
GFE												
Subtotal Support			0	0		.997				5.010	6.007	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	Fy00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation		VARIOUS	0	0		0				4.000	4.000	
Operational Test & Evaluation		VARIOUS	0	0		0				5.752	5.752	
Tooling												
GFE												

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Exhibit R-3 Cost Analysis										Date: February 1999	
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N			Program Element Name & No.Airborne Mine Countermeasures 0604373N				Project Name and Number. Shallow Water Influence Minesweep System/Q2427				

Subtotal T&E			0	0		0				9.752	9.752	
Remarks:												
Contractor Engineering Support		TBD		.120	11/98						.120	
Government Engineering Support	WR	TBD	.040	.905	11/98	.250	11/99			1.748	2.943	
Program Management Support		VARIOUS	.122	1.091	11/98	.637	11/99			4.740	6.590	
Program Management Personnel												
Travel			.002	.030		.025				.100	.157	
Labor (Research Personnel)												
Overhead												
Subtotal Management			.164	2.146		.912				6.588	9.810	
Remarks:												
Total Cost			1.886	2.146		4.830				35.707	44.569	
Remarks:												

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Exhibit R-3 Project Cost Analysis
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Exhibit R-2a, RDT&E,N Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Laser Mine Detection Systems/Q2047	

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	0	4.897	19.904	18.272	15.083	21.636	0	0	0	79.792
RDT&E Articles Qty										

A. Mission Description and Budget Item Justification

Airborne Laser Mine Detection Systems (ALMDS) is a light detection and ranging (LIDAR) system for rapid detection and localization of floating and near surface tethered mines. A competitive evaluation of ALMDS candidate technologies represented by the Magic Lantern and ATD-III systems was conducted in FY 98. Data obtained from this evaluation will significantly reduce the risk associated with a follow-on ALMDS procurement decision.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 1998 Plan

- Not applicable.

2. (U) FY 1999 Plan

- (U) (\$.984) Prepare RFP, evaluate response to award contract.
- (U) (\$1.000) Evaluate integration studies.
- (U) (\$1.872) Initiate engineering design.
- (U) (\$.960) Prepare MS II documentation.
- (U) (\$.081) Portion of extramural program is reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2000 Plan

- (U) (\$14.413) Award contract for EMD and perform systems engineering.
- (U) (\$5.491) Continue the development of support equipment, software, training, ILS, configuration and technical data.

B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 424800										
ALMDS	0	0	0	0	0	0	29.400	45.000	0	74.400

C. Acquisition Strategy: Full and open competition is planned for the ALMDS EMD program.

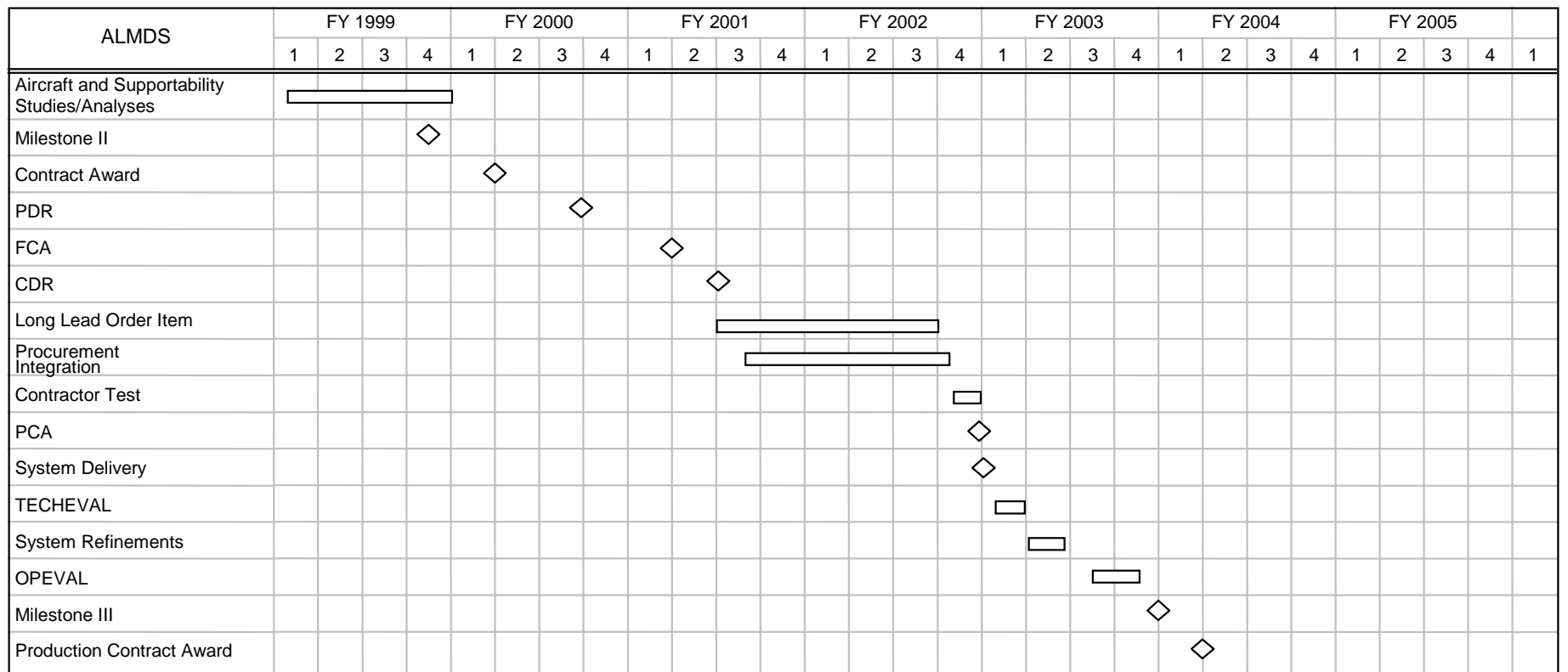
D. Schedule Profile: See attached.

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AIRBORNE LASER MINE DETECTION SYSTEM



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Exhibit R-3 Cost Analysis					Date: February 1999		
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Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF WR	TBD CSS, Panama City		.924	10/98	5.000 2.000	12/99 9/99			19.000 3.446	24.000 6.370	
Ancillary Hardware Development												
Systems Engineering												
Licenses	CPFF	TBD				.300	11/99				.300	
Tooling	CPFF	TBD				.481	11/99			.115	.596	
GFE												
Award Fees												
Subtotal Product Development				.924		7.781				22.561	31.266	
Remarks:												
Development Support Equipment	CPFF WR	TBD CSS, Panama City				.750 .800	12/99 11/99			1.000 .976	1.750 1.776	
Software Development	CPFF WR	TBD CSS, Panama City		.500	11/98	1.500 1.500	12/99 11/99			2.851 2.000	4.351 4.000	
Training Development	CPFF WR	TBD CSS, Panama City								1.300 1.284	1.300 1.284	
Integrated Logistics Support	CPFF WR	TBD CSS, Panama City				.750 .750	12/99 11/99			1.150 1.100	1.900 1.850	
Configuration Management	CPFF WR	TBD CSS, Panama City				.500 .200	12/99 11/99			1.000 .700	1.500 .900	
Technical Data	CPFF WR	TBD CSS, Panama City		1.000	10/98	.750 .750	12/99 11/99			1.750 .950	2.500 2.700	
GFE												
Subtotal Support				1.500		8.250				16.061	25.811	
Remarks:												

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APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5			Program Element Name & No.Airborne Mine Countermeasures 0604373N				Project Name and Number. Airborne Laser Mine Detection Systems/Q2047				

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	Fy00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	CPFF WR	TBD CSS, Panama City								1.000 3.500	1.000 3.500	
Operational Test & Evaluation	CPFF WR	TBD CSS, Panama City								1.000 4.000	1.000 4.000	
Tooling												
GFE												
Subtotal T&E										9.500	9.500	
Remarks:												
Contractor Engineering Support	CPFF	TBD				.750	12/99			1.250	2.000	
Government Engineering Support	WR	CSS, Panama City		1.439	11/98	.750	11/99			1.319	3.508	
Program Management Support	CPFF WR	TBD CSS, Panama City		1.000	11/98	1.000 .726	12/99 11/99			1.500 1.525	2.500 3.251	
Program Management Personnel												
Travel		VARIOUS		.034	11/98	.175	11/99			.825	1.034	
Labor (Research Personnel)		VARIOUS				.472				.450	.922	
Overhead												
Subtotal Management				2.473		3.873				6.869	13.215	
Remarks:												
Total Cost			0	4.897		19.904				54.991	79.792	
Remarks:												

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Exhibit R-2a RDT&E Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Mine Neutralization Systems/Q2473	

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	0	1.995	10.309	8.070	18.696	16.615	9.824	0	0	65.509
RDT&E Articles Qty										

A. Mission Description and Budget Item Justification

This is a system for mine neutralization by explosive charge, and equipment to provide shallow and deep water mine hunting and minefield reconnaissance capabilities against both bottom and moored mines. There is currently no rapid airborne mine neutralization capability to support minehunting. Additionally, the Navy does not possess a capability to conduct high speed minefield reconnaissance to determine mine density and location. The Airborne Mine Neutralization System (AMNS) research and development effort was restarted in FY97 in Project Q0529 P.E. 0604373N. AMNS will provide the capability to neutralize bottom and moored mines using an airborne delivered, expendable mine neutralization device.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 1998 Plan

- Not applicable.

2. (U) FY 1999 Plan

- (U) (\$.051) Portion of extramural program is reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
- (U) (\$1.944) AMNS - Perform study to evaluate the effectiveness of autonomous operational mine neutralization. Congressional Add.

3. (U) FY 2000 Plan

- (U) (\$1.603) AMNS - Will take delivery of prototype neutralizers, prototype AMNS and integrate aboard H-53.
- (U) (\$3.706) AMNS - Will conduct TECHEVAL and OPEVAL testing for MH-53 interim capability.
- (U) (\$5.000) RAMICS – H-60 gun integration.

B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 424800										
AMNS	0	0	4.300	7.700	7.700	7.700	7.700	7.700	0	42.800
RAMICS	0	0	0	0	0	0	0	21.000	0	21.000

C. Acquisition Strategy: Full and open competition is planned for the ALMDS EMD program.

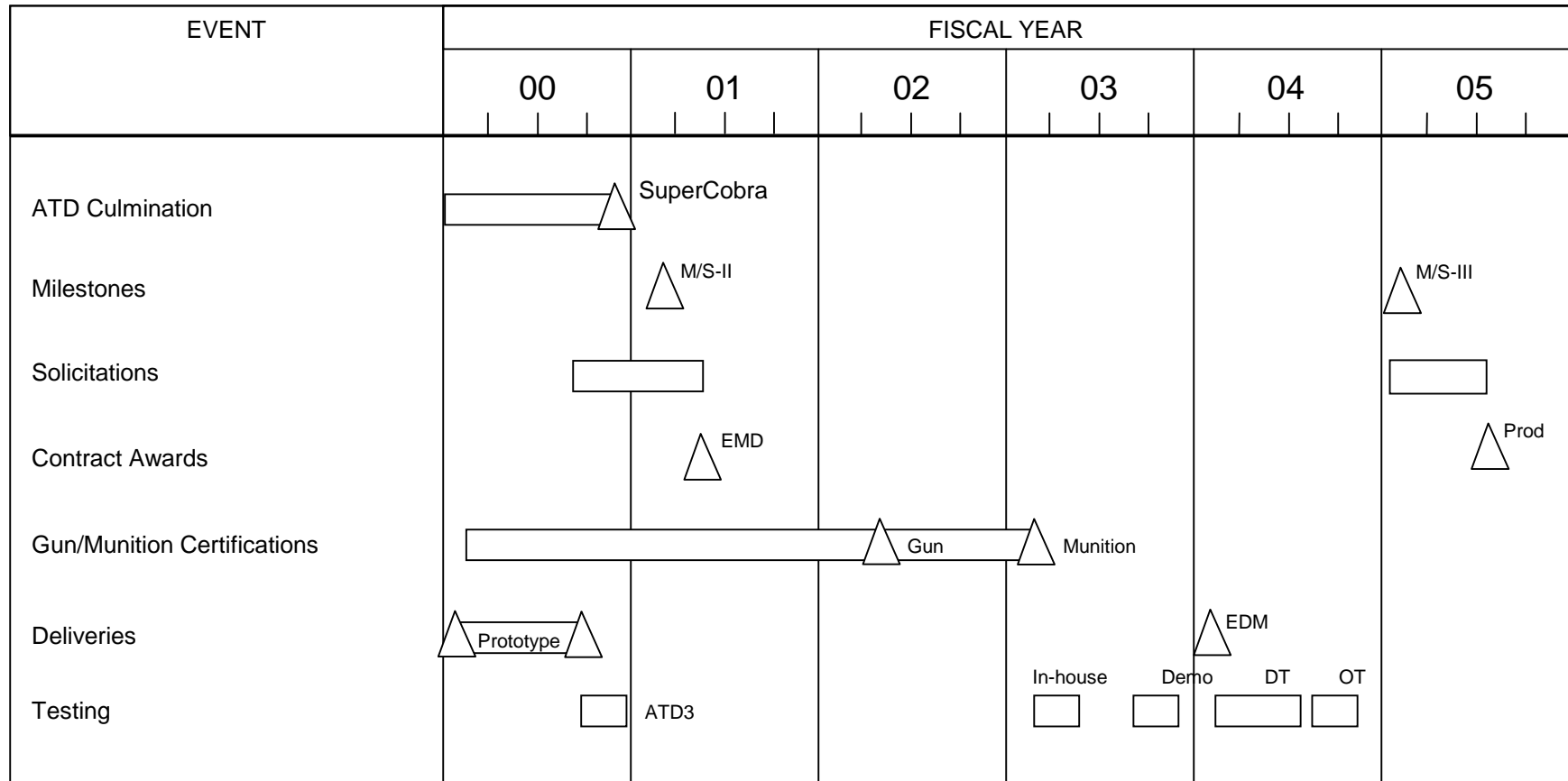
D. Schedule Profile: See attached.

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Exhibit R-2a RDT&E Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Mine Neutralization Systems/Q2473

RAPID AIRBORNE MINE CLEARANCE SYSTEM



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Exhibit R-2a RDT&E Project Justification
(Exhibit R-2, Page 19 of 24)

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Exhibit R-3 Cost Analysis										Date: February 1999	
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5			Program Element Name & No.Airborne Mine Countermeasures 0604373N				Project Name and Number. Airborne Mine Neutralization Systems/Q2642				

	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development AMNS RAMICS	C/FP	TBD				.150 2.500	12/99	.		2.800 24.000	2.950 26.500	
Ancillary Hardware Development												
Systems Engineering	WR	VARIOUS				2.738	10/99			10.300	13.038	
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development						5.388				37.100	42.488	
Remarks:												
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support	WR	VARIOUS				1.200	10/99			.685	1.885	
Configuration Management												
Technical Data												
GFE												
Subtotal Support						1.200				.685	1.885	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	Fy00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	CSS, Panama City				3.456	10/99			8.005	11.461	
Operational Test & Evaluation	WR	OPTEVFOR								7.005	7.005	

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Exhibit R-3 Project Cost Analysis
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Exhibit R-3 Cost Analysis										Date: February 1999	
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5			Program Element Name & No.Airborne Mine Countermeasures 0604373N				Project Name and Number. Airborne Mine Neutralization Systems/Q2642				

Tooling												
GFE												
Subtotal T&E						3.456				15.010	18.466	
Remarks:												
Contractor Engineering Support		VARIOUS		1.944	11/98						1.944	
Government Engineering Support												
Program Management Support	C/FP	TBD				.200	10/99			.200	.400	
Program Management Personnel												
Travel				.051		.065				.210	.326	
Labor (Research Personnel)												
Overhead												
Subtotal Management				1.995		.265		.		.410	2.670	
Remarks: AMNS Project Only (FY00=\$5.458, FY01=\$3.200, FY02=\$4.000, FY=\$1.900); RAMICS Project Only (FY00=\$5.000, FY01=\$5.000, FY02=\$15.000, FY03=\$15.000, FY04=\$10.000)												
Total Cost			0	1.995		10.309				53.205	65.509	

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Exhibit R-3 Project Cost Analysis
(Exhibit R-3, Page 21 of 24)

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Exhibit R-2a, RDT&E,N Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Mine Neutralization Systems/Q2642	

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	0	1.995	0	0	0	0	0	0	1.995	1.995
RDT&E Articles Qty										

A. Mission Description and Budget Item Justification

The SWIMS will provide a self-contained, high tow speed, shallow water influence minesweep capability.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 1998 Plan

- Not applicable.

2. (U) FY 1999 Plan

- (U) (\$1.995) Establish test plans and procedures.

3. (U) FY 2000 Plan

- Not applicable.

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B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
Not applicable.										

C. Acquisition Strategy:

D. Schedule Profile: See attached.

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Exhibit R-2a, RDT&E,N Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Mine Neutralization Systems/Q2642	

	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/FP	EDO Corp		1.000	01/99						1.000	
Ancillary Hardware Development												
Systems Engineering												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development				1.000							1.000	
Remarks:												
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	Fy00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	CSS, Panama City										

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Exhibit R-2a RDT&E,N Justification
(Exhibit R-2a, Page 23 of 24)

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Exhibit R-2a, RDT&E,N Project Justification			Date: February 1999
APPROPRIATION/BUDGET ACTIVITY: RDT&E,N/BA-5	Program Element Name & No.Airborne Mine Countermeasures 0604373N	Project Name and Number. Airborne Mine Neutralization Systems/Q2642	

Operational Test & Evaluation	WR	CSS, Panama City		.995	01/99						.995	
Tooling												
GFE												
Subtotal T&E				.995							.995	
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support												
Program Management Personnel												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Remarks:												
Total Cost			0	1.995		0					1.995	

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